

R. L. HARRIS.  
 ACCIDENT PREVENTING BOTTLE CLOSURE.  
 APPLICATION FILED OCT. 17, 1919.

1,355,092.

Patented Oct. 5, 1920.

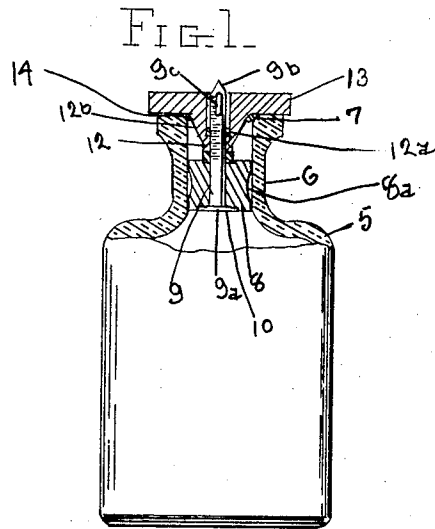
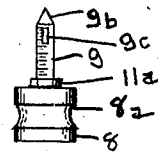
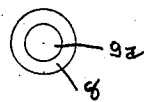
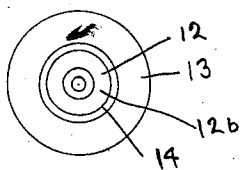
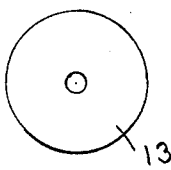


FIG. 2.

FIG. 3.

FIG. 4.

FIG. 5.



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# UNITED STATES PATENT OFFICE.

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## ACCIDENT-PREVENTING BOTTLE-CLOSURE.

1,355,092.

Specification of Letters Patent.

Patented Oct. 5, 1920.

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*To all whom it may concern:*

Be it known that I, RALPH L. HARRIS, a citizen of the United States of America, residing at Northampton, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Accident-Preventing Bottle-Closures, of which the following is a specification.

This invention relates to improvements in accident preventing bottle closures and its leading object is to provide a closure for medicine bottles and the like used for containing poisonous or dangerous fluids or preparations, which will present a flesh pricking signal point above the mouth of the bottle or container and which can only be removed by the use of the special nut or other device, whereby the user will be thus informed that the contents of the bottle are of a character to require great care in dispensing.

Another object of the invention is to provide a nut for removing the closure which will form an auxiliary seal during the shipment of the bottle and its contents.

With the above and other objects in view this invention relates to certain new and useful constructions, combinations and arrangements of parts, clearly described in the following specification and fully illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of a bottle showing the neck inclosure in longitudinal section.

Fig. 2 is a top plan view of the closure and removing nut.

Fig. 3 is a bottom plan view of the closure and the nut.

Fig. 4 is an end view of the closure.

Fig. 5 is a detail side view of the closure and its threaded shank.

Referring to the accompanying drawings 5 designates a container having a neck 6 and the usual flared mouth 7. In the neck 6 a closure of cork or similar material 8 is inserted. This closure or stopper is mounted upon a metal or rigid shank 9 which is formed with a head 9<sup>a</sup> on its lower end covered by a sheet of celluloid or lacquer 10, which provides a stop to limit the endwise movement of the closure or stopper 8. The closure or stopper 8 is shown to be formed with a circumscribing medial groove 8<sup>a</sup> which thus provides a contacting surface at each end of the stopper or closure.

The shank 9 is rigidly secured to the stopper by means of a nut 11<sup>a</sup>, so that the stopper or closure 8 will not shift longitudinally on the shank or stem 9. The stopper or closure 8 is adapted to be inserted in the neck of a bottle so that its upper surface will be considerably spaced from the mouth of the bottle neck. The upper end or terminal portion of the stem 9 is formed with a signal point 9<sup>b</sup> capable of pricking the flesh of the user or any person passing their hand over the bottle in the dark. The terminal portion of the shank 9 is also formed with an eye or transverse opening 9<sup>c</sup>, whereby a wire or other pointed article may be extended through the shank and the shank withdrawn.

The closure may also be withdrawn by pulling upon the nut 12 which is composed of wood or similar material and has a longitudinal opening to receive the shank 9. In said opening the metal nut 12<sup>a</sup> is embedded, being preferably forced inwardly from the upper end of said opening. The operating element or nut 12 is also formed with an enlarged head 13 which is adapted to abut against the upper end of the bottle neck and is connected to the pendant portion by means of a tapered portion 12<sup>b</sup> around which a sealing gasket 14 is arranged, said gasket being adapted to engage the flared mouth or seat 7 so as to provide an auxiliary seal for the bottle.

Having described my invention, I claim:

An accident preventing closure for bottles consisting of a closure adapted to be fitted in the neck of a bottle, a shank having a head protected against corrosion disposed against the inner end of said closure and extending above said closure, the terminal portion of said shank being threaded and provided with a transverse opening said shank also being provided with a flesh pricking point, a nut threaded on said shank to compress the closure between said head and said nut, a cap threaded on said shank and provided with a conical portion adapted to engage the nut, said cap having a flange adapted to overlie the mouth of a bottle and being adapted to force said closure into the neck of a bottle so that the outer side of said closure will lie below the mouth of the bottle and the point of said shank will project outwardly of the mouth of the bottle.

Signed by me at Springfield, Mass.

RALPH L. HARRIS.